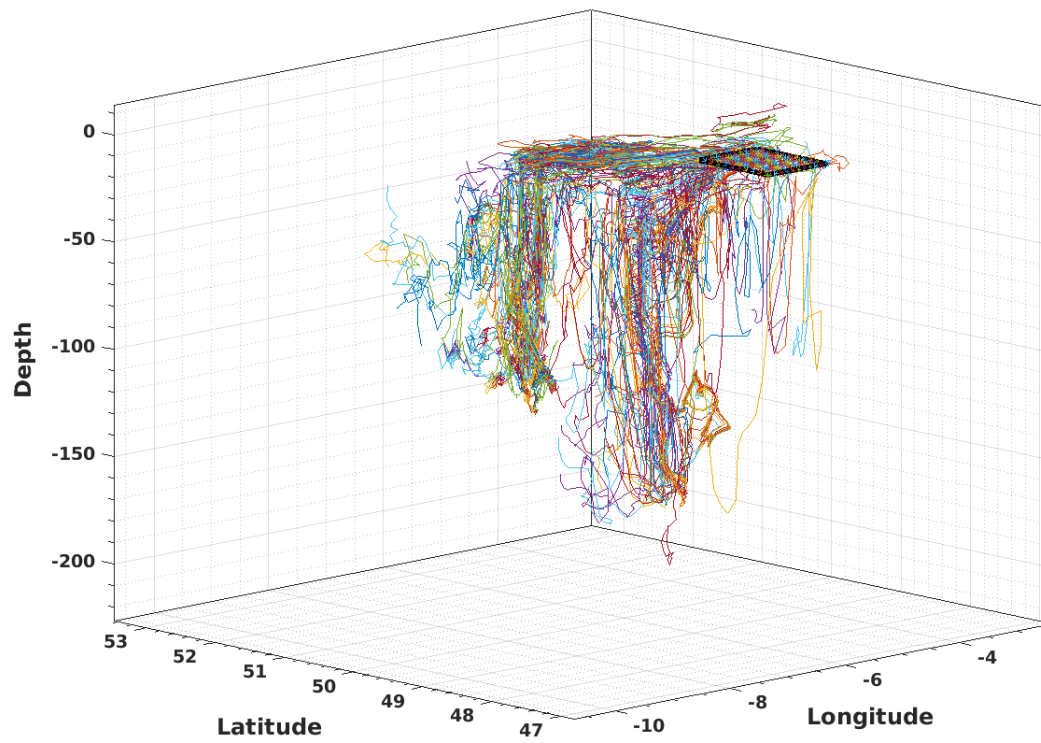


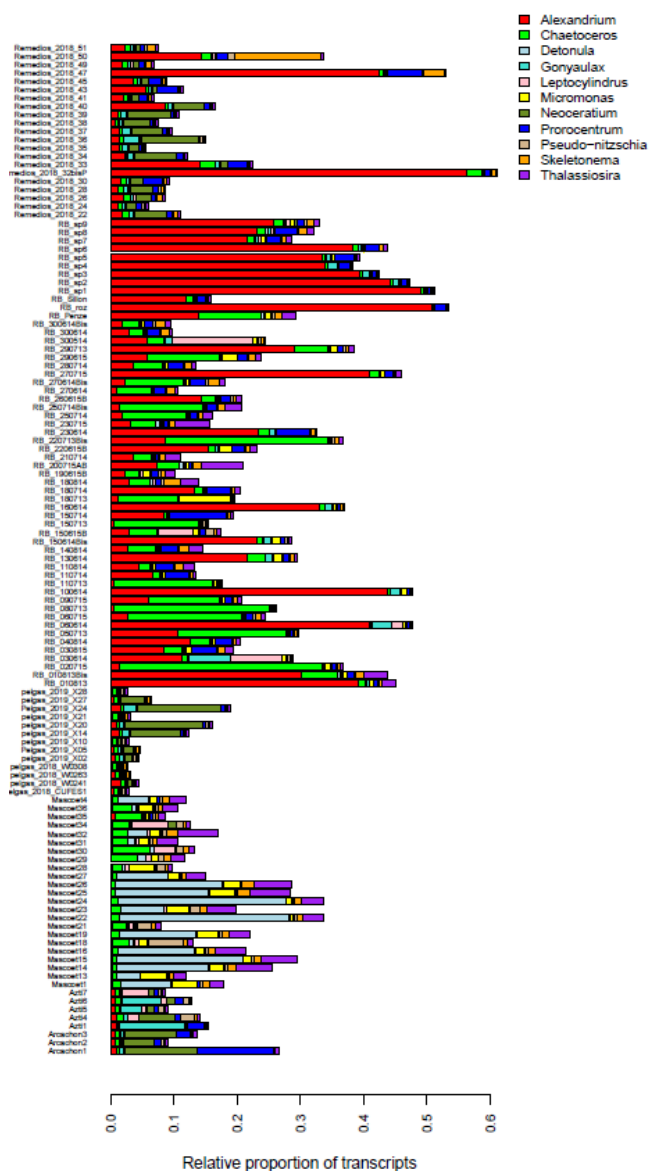
## *Supplementary Material*

### 1 SUPPLEMENTARY TABLES AND FIGURES

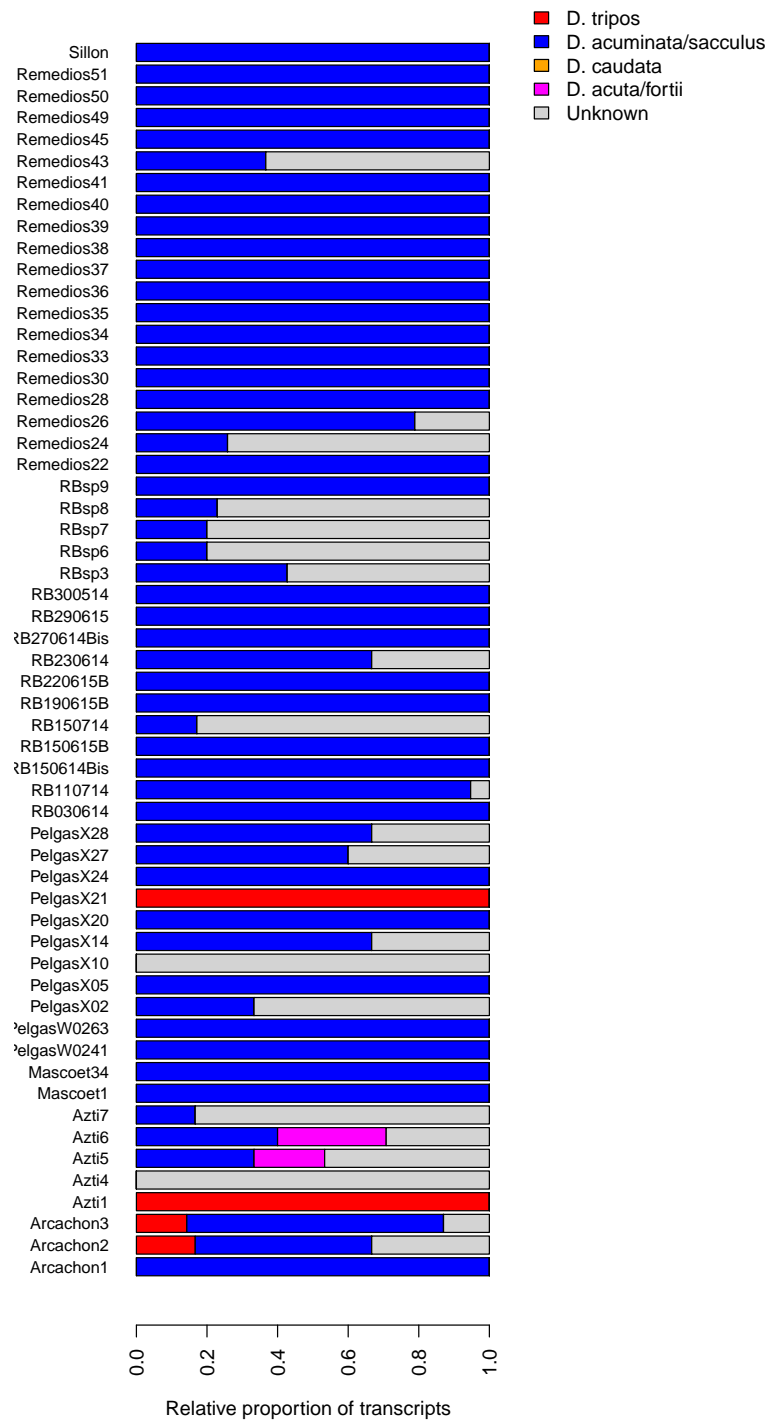
#### 1.1 Figures



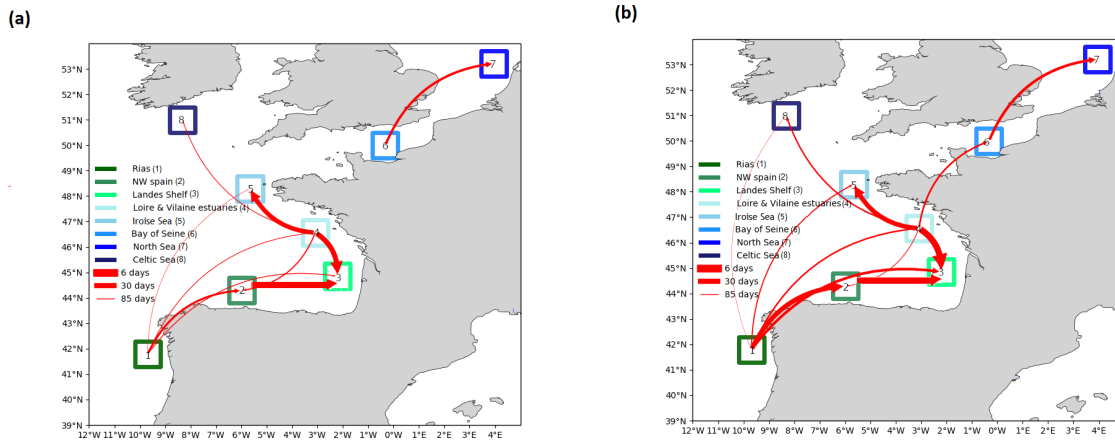
**Figure S1.** 3D trajectories for a subsample of particles deployed from one of the stations.



**Figure S2.** Relative proportion of transcripts for the 11 most abundant genus from *in-situ* samples. The meta-reference of 213 unique genus was used and only the 59 environmental samples with more than 20 000 reads aligning to the *Dinophysis* reference transcriptome are plotted.



**Figure S3.** Relative proportion of transcripts from *in-situ* samples using a lower number of markers. The lower taxonomic resolution (only 5 taxonomic groups) allows the use of an higher number of samples.



**Figure S4.** Geographical representation of the connectivities (average over 5 years) for area 1, 2, 4 and 6 in spring and summer (a and b respectively). The line thickness represents the scale of connection time where the thicker lines have shorter transit times between stations.